In re: Hollick et al.

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Amendments to the claims:

This listing of the claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

1. (Currently amended) A method for the encapsulation of a nuclear material, comprising: which comprises

treating the <u>nuclear</u> material with an encapsulant which comprises a cementitious material; and

curing said cementitious material[[.]];

wherein said nuclear material comprises uranium metal, Magnox fuel elements, and/or fuel element debris.

- 2. (Canceled)
- 3. (Currently amended) A method as claimed in claim 1 or 2 wherein the cementitious material comprises Portland Cement.
- 4. (Currently amended) A method as claimed in <u>claim 1</u> any one of claims 1, 2 or 3 wherein the cementitious material additionally <u>further</u> comprises one or more at least one inorganic <u>filler</u>, the at least one inorganic <u>filler</u> comprising fillers selected from blast furnace slag, pulverised fuel ash, hydrated lime, finely divided silica, limestone flour and <u>and/or</u> organic and inorganic fluidising agents.
- 5. (Currently amended) A method as claimed in <u>claim 1</u> any preceding claim wherein the cementitious material is provided in the form of an aqueous composition.
- 6. (Currently amended) A method as claimed in claim 5 wherein the water content of the composition is in the region of about 40-50% (w/w).

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7. (Currently amended) A method as claimed in claim 1 further comprising:

placing the nuclear material in a container before treating the nuclear material and

curing the cementitious material any preceding claim wherein the nuclear material is placed
in an appropriate container and a cementitious material is added and allowed to at least
partially cure.

- 8. (Original) A method as claimed in claim 7 wherein elements of the nuclear material are either arrayed in the container or mixed haphazardly.
- 9. (Currently amended) A method as claimed in claim 7 <u>further comprising:</u>
 capping the container after the cementitious material has at least partially cured or 8
 wherein the container is subsequently capped.
- 10. (Currently amended) A method as claimed in claim 7, 8 or 9 wherein the container comprises a drum having a capacity in the region of about 500 litres.
- 11. (Currently amended) A method as claimed in claim 10 wherein the <u>an</u> amount of nuclear material stored <u>in the container</u> is up to <u>about</u> 52 elements.
- 12. (Currently amended) A method as claimed in claim 11 wherein the number of elements is of the order of about 22.
- 13. (Currently amended) A method for the storage of storing a nuclear material comprising:

encapsulating the nuclear material in a cured cementitious material, wherein said nuclear material comprises uranium metal, Magnox fuel elements, and/or fuel element debris which comprises encapsulation of the material in a cured cementitious material.